Abstract

Process for preparing an alkene oxide, which comprises at least the steps (i), (ii) and (v):

- (i) providing a stream S1 comprising compressed, liquid alkene;
- 5 (ii) depressurizing at least part of the stream S1 with absorption of heat and with at least partial vaporization of the liquid alkene;
 - (v) reacting the alkene obtained in (ii) with a hydroperoxide in the presence of at least one solvent and at least one catalyst to give a mixture comprising alkene oxide and the solvent or solvents.

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